

**ABSTRACT**

The icemaker presented here may use a microcontroller, and solid state refrigeration and heat transfer elements to create ice cube qualities ranging from “clear  
5 ice” to “fast ice” in a smooth, user selectable continuum. In one embodiment, this may be accomplished by fitting a standard, high production volume icemaker mold with (1) thermoelectric coolers operated in a controlled fashion to heat or cool the mold, (2) a mold temperature sensor (such as a thermistor), and (3) a microcontroller to monitor the process and to adjust the growth rate of ice forming in the mold by adjusting heat  
10 transfer rates to optimize particular cooling phases.